II. SPECIFICATION AMENDMENTS

➤ Please replace the paragraphs beginning on page 19, line 1 through page 19, line 27 as rewritten below:

Figure 12 illustrates as an example a circuit corresponding to a lattice filter structure 1200 according to a fourth preferred embodiment of the invention. The lattice filter structure 1200 comprises four pluralities of piezoelectric resonators. In this lattice filter structure 1200, the pluralities 1210a, 1210b are connected in series between the input conductors 1030a, 1030b and output conductor 1040a and 1040b and the pluralities 1220a, 1220b are connected is parallel between the input conductors and the output conductors. The pluralities 1010a 1210a and 1010b are typically identical (or as identical as it 1210b possible to manufacture), as well as pluralities 1020a and 1020b 1220b. Compared to a prior art lattice filter, in lattice filter structure 1200 the first resonator in series and the first resonator in parallel are replaced with pluralities of piezoelectric resonators. To keep the filter symmetric, also the rest of the resonators in a prior art lattice filter are replaced with pluralities of piezoelectric resonators. In filter structure 1200, as an example, a plurality 1210a, 1210b consists of two piezoelectric resonators and a plurality 1220a, 1220b consists of two three piezoelectric resonator.

The piezoelectric resonators belonging to said pluralities 1210a, 1210b, 1230a 1220a, 1230b 1220b may be, for example, piezoelectric BAW resonators, which are formed by patterning a piezoelectric layer into separate blocks of piezoelectric material, each BAW resonator thus comprising such a separate

a

Corold

block of piezoelectric material. These piezoelectric BAW resonators are typically connected to each other using vias, which are made through a protective layer. Alternatively, it is possible that the BAW resonators are formed using a single piezoelectric layer into which a necessary number of vias is formed for connecting the BAW resonators to each other and/or to the other filter circuitry. Alternatively, the piezoelectric resonators belonging to said pluralities 1210a, 1210b, 1230a 1220a, 1230b 1220b may be, for example, piezoelectric SAW resonators. Typically when a filter comprises piezoelectric resonators, only either BAW or SAW resonators are used in a filter structure.

➤ Please replace the paragraph beginning on page 21, line 1 through page 21, line 17 as rewritten below:

a2

The pass band or pass bands of the first filter branch is/are different from that/those of the second filter branch, and a filter structure 1400 therefore separates transmitted signals from received ones. Transmitted signals, whose frequency band is different from that of a received signals, experience the second filter branch 1302 1402 as a high impedance and do not enter the second filter branch. In cellular systems, the power of a transmitted signal may be, for example, at maximum 2 W. The power of received signals, on the other hand, may be of the order of -100dBm. Similarly, a received signal experiences the first filter branch as a high impedance, and enters the second filter branch. This way practically all the received signal power enters the receiver circuitry.

In a filter structure 1400, the first filter branch comprises a plurality of piezoelectric filter connected in series in accordance with the invention. The first filter branch may, for

loveld A2 example, comprise a ladder filter structure 1100 or a balanced lattice filter structure 1200. None restrictions are posed on the structure of the second filter branch 1402 in a filter structure 1400, as typically the power level of a received signal are so small that power handling capacity does not cause problems there. A filter structure 1400 is advantageously used in mobile communication devices.